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Energy Security: A Global Challenge

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By
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Powering America's Defense: Energy and the Risks to National Security

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Military Advisory Board Member**



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Background



April 2007: *National Security and the Threat of Climate Change*
www.SecurityandClimate.cna.org



May 2009: *Powering America's Defense: Energy and the Risks to National Security*
www.PoweringAmericasDefense.org

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Fundamental Questions:

- What are the **national security threats** associated with energy?
- What is an **appropriate role for DoD** in addressing these threats?
- The MAB's debate led to:
findings and priorities

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“ We **never** have 100% certainty.

If you wait until you have 100% certainty,
**something bad is going to happen
on the battlefield.**

That's something we know.”

Gen. Gordon Sullivan (Ret)
Former U.S. Army Chief of Staff

Finding 1: U.S. Energy Posture is a Threat



America's energy posture constitutes a **serious and urgent threat** to national security—**militarily, diplomatically and economically**

- **Oil dependence**
- **Weakness of U.S. electrical grid**

U.S. Oil Dependence Undermines National Security



- **Weakens** international leverage
- **Jeopardizes** foreign policy
- **Exacts** huge price tag in dollars and lives
- **Entangles** US with hostile regimes
- **Undermines** economic stability

Dependence on Oil: Mission Impacts



Dependence on Oil: Drives Instability

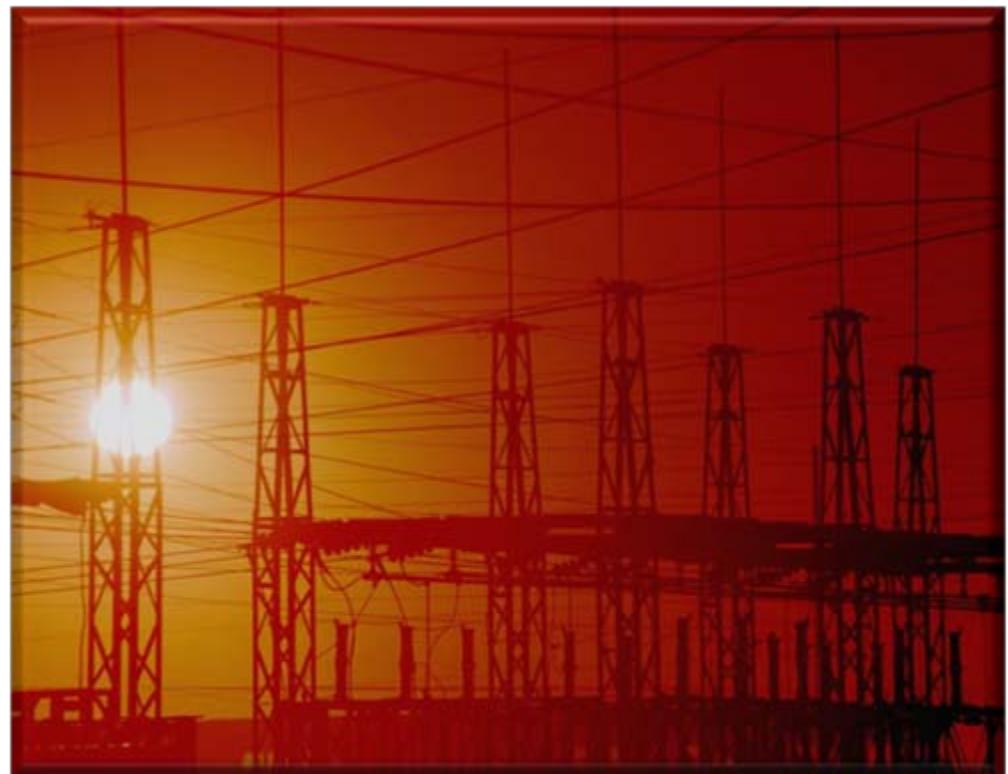


- **Interdependence** issues with climate change
- **Competition** for resources

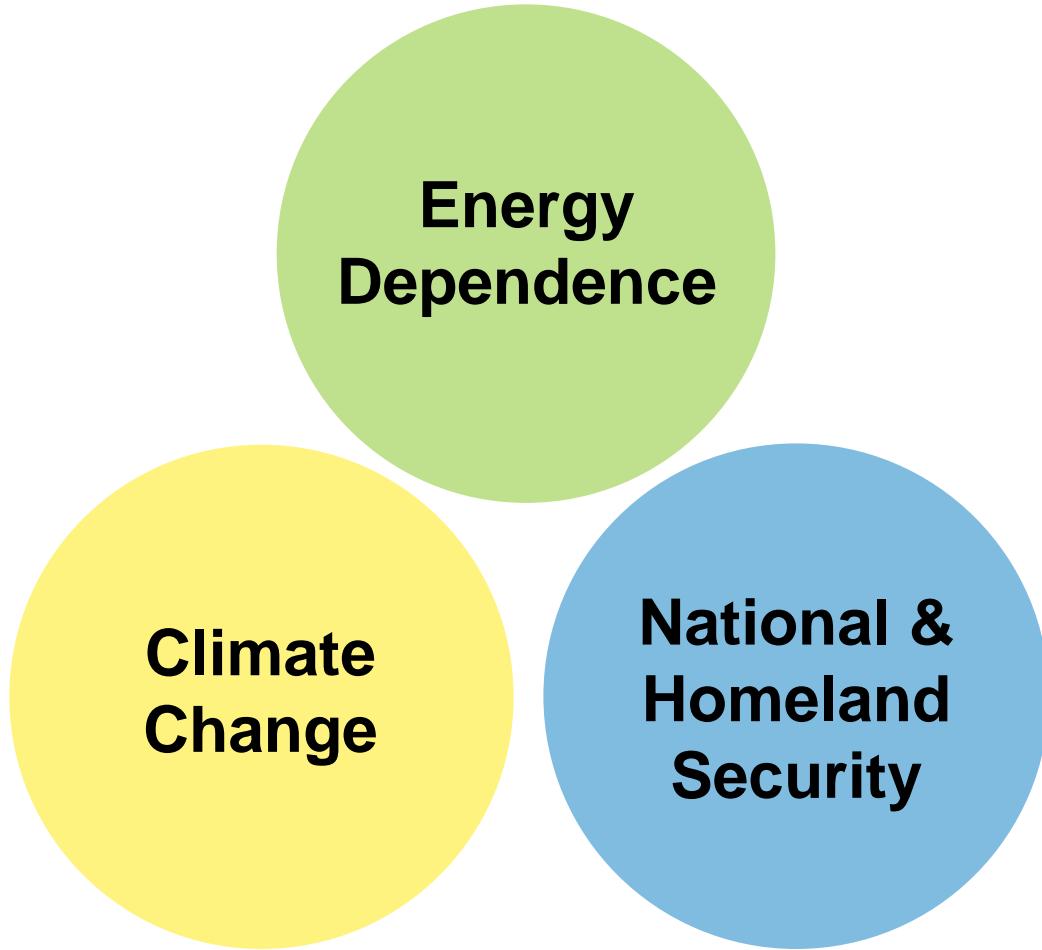
Grid a Dangerously Weak Link

Domestic electrical grid is outdated, fragile, and overtaxed—and a **threat to military capability**

- U.S. military bases
vulnerable to deliberate or accidental incidents
 - Cyber weakness
 - Reach back
 - Training and readiness



Finding 2: Converging Risks



Continuing energy business as usual creates an **unacceptably high threat level** from a series of converging risks

Finding 3: Commitment to Energy Security



Achieving energy security in a carbon-constrained world is possible, and requires **concerted leadership** and **continuous commitment**

Finding 4: Strengthen Planning Processes



The national security planning processes have **not been sufficiently responsive** to the security impacts of our current energy posture

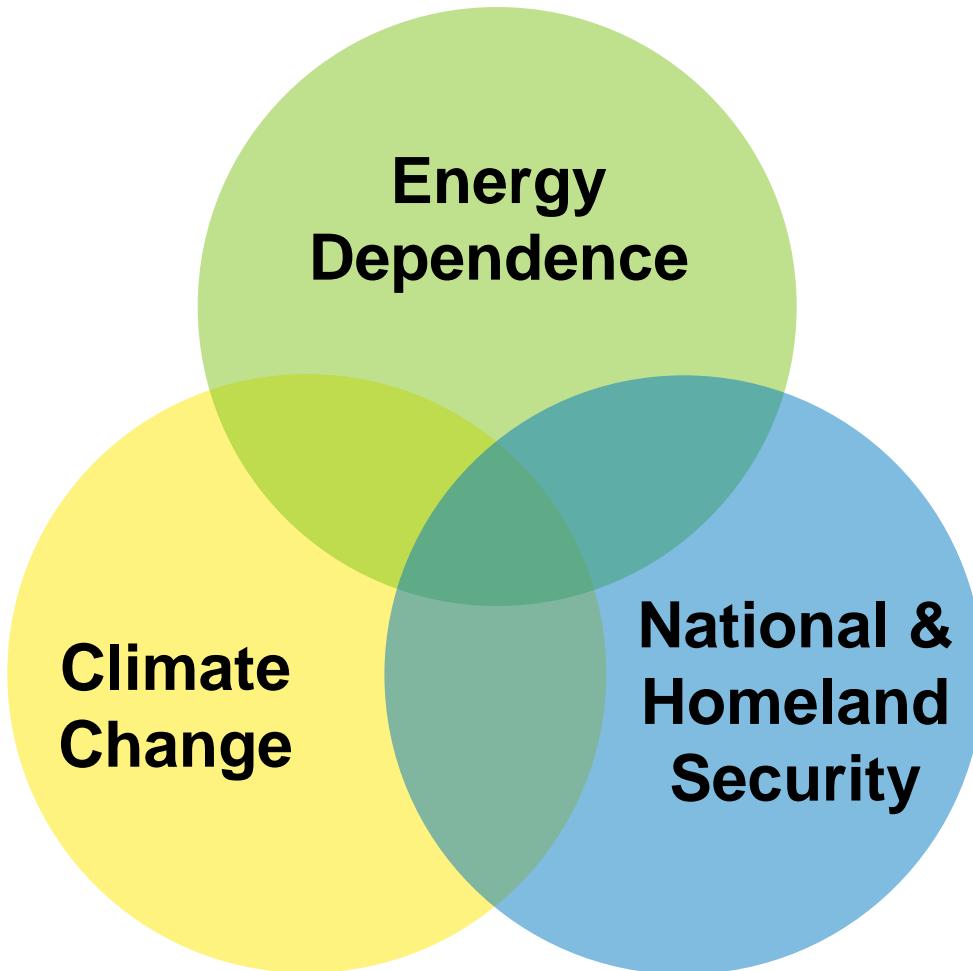
- Strategic planning
- Operational planning

Finding 5: DoD Must Lead the Way



DoD can contribute to national solutions as a **technological innovator** and **early adopter**

Recommendations: #1



Energy security and climate change goals should be clearly and fully integrated into our national security and military **planning processes**

Recommendations

2. Design & deploy systems to the field to **reduce the burden** of inefficient energy usage
3. Know DoD's Carbon **Bootprint**
4. **Transform installations** through aggressive pursuit of energy efficiency, smart grid technologies and electrification of non-tactical vehicle fleet
5. Expand distributed & **renewable energy** generation
6. Invest in long-term **shift to low-carbon** liquid fuels

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This is America.
We're pretty good at getting stuff done.

We need to get this one done.



Suggested Websites

PoweringAmericasDefense.org

SecurityandClimate.cna.org

Powering America's Defense: Energy and the Risks to National Security

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